



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,980	10/08/2003	Werner Knebel	5005.1061	6488
23280	7590	11/14/2005	EXAMINER	
DAVIDSON, DAVIDSON & KAPPEL, LLC 485 SEVENTH AVENUE, 14TH FLOOR NEW YORK, NY 10018			FINEMAN, LEE A	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/680,980	Applicant(s) KNEBEL, WERNER	
	Examiner Lee Fineman	Art Unit 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 3-5, 7 and 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6, 8-11 and 13-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/8/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to an amendment filed 1 September 2005 in which claim 1 was amended and claim 18 was added. Claims 1-18 are pending of which claims 3-5, 7 and 12 are withdrawn.

Claim Objections

1. Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 6 recites only the limitation "wherein the manipulating light beam can be guided over and/or through the sample using the beam deflection device." This limitation was added to amended claim 1, from which claim 6 depends.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 6, 8-11 and 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Knebel et al. US 2002/0020800 A1.

Regarding claims 1, 6, 8-9 and 17, Knebel et al. disclose in fig 2 a confocal scanning microscope (page 5, section [0056]) comprising a light source (3 and 4) that emits an

Art Unit: 2872

illuminating light beam (on 5), for illumination of a sample (1), that extends along an illumination beam path (5) and can be guided over and/or through the sample (1) using a beam deflection device (12); a detector (6) that receives detection light (on 7), proceeding from the sample (1), that extends along a detection beam path (7); a light source (8) that emits a manipulating light beam (on 9); and a mirror (21) that is at least partially transparent to the illuminating light beam (page 5, section [0059], lines 3-7), which can be introduced in guided fashion into the illumination beam path (fig. 2, at least in so far as it was guided into place during assembly), whereby the mirror directs the manipulating light beam via the beam deflection device onto the sample (see page 2, section [0027], lines 7-8, if one beam deflection device is used for the beam combination, then it will also direct the manipulation light onto the sample); and wherein the illuminating light beam and the manipulating light beam can be guided over and/or through the sample using the beam deflection device (see page 2, section [0027], lines 7-8, if one beam deflection device is used for the beam combination, then it will also guide both light beams through the sample).

Regarding claims 10-11, Knebel et al. further disclose wherein the illuminating light beam (on 5) can be guided on a scanning track (by 12) over and/or through the sample (1); and wherein the manipulating light beam can be guided on the scanning track over and/or through the sample (see page 2, section [0027], lines 7-8, if one beam deflection device is used for the beam combination, then it will also guide the manipulation light beam on a scanning track through the sample).

Regarding claim 13, Knebel et al. further disclose wherein the scanning track is largely meander-shaped or sinusoidal (see fig. 4).

Regarding claims 14-16, Knebel et al. further disclose wherein the manipulating light beam at least partially bleaches the sample (page 2, section [0023], lines 18-19); wherein the manipulating light beam cuts the sample (page 2, section [0023], lines 17-18); and wherein the manipulating light beam acts as an optical tweezers (page 2, section [0023], lines 16-17).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knebel et al. in view of Batchelder et al. US 5,689,333.

Knebel et al. disclose the claimed invention except for wherein the mirror is a hinged mirror and wherein the mirror can be put in a neutral position out of the illuminating beam path. Batchelder et al. teach in fig. 1 a microscope with mirrors (46, 74 or 76) which move in and out of the beam path to direct light in the system, i.e., wherein the mirror can be put in a neutral position out of the illuminating beam path, (column 2, lines 54-57 and column 4, lines 22-23) and which can be hinged (column 4, lines 41-42). It would have been obvious to one of ordinary skill in the art to make the mirror of Knebel et al. a hinged mirror which moves in and out of the beam path as suggested by Batchelder et al. to permit ordinary use of the microscope without the second light beam (Batchelder, column 2, lines 54-57).

Response to Arguments

6. Applicant's arguments filed 1 September 2005 have been fully considered but they are not persuasive.

Applicant argues that, because the scanning mirror of Knebel is transparent to one of the two beam paths when a single beam deflection device is used, it cannot "guide both the manipulation and illumination light beams over the sample" (page 6, paragraph 1 of remarks). The examiner respectfully disagrees and would like to point out that when "and/or" is used within the limitation of a claim, any of three conditions (i.e. A and B, A only, B only) will meet that limitation. In the instant case, even if the beam deflection device is transparent to the manipulation beam, it is guiding that beam through the sample and therefore meets at least the B only condition (i.e. only through the sample).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hoffmann, US 2002/0109101 A1 disclose an optical manipulation microscope systems with two light sources and one beam deflection device.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

Art Unit: 2872

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



LAF
November 8, 2005


MARK A. ROBINSON
PRIMARY EXAMINER